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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,726	03/22/2005	Eiji Kadouchi	MAT-8674US	6927

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EXAMINER	
JIANG, YONG HANG	
ART UNIT	**PAPER NUMBER**
2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,726	KADOUCHI ET AL.	
	Examiner	Art Unit	
	Yong Hang Jiang	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/22/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7-9, 11, 13-14, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hattori (JP 2003102068 A).

Regarding claim 1, Hattori discloses a device (via vehicle mounted machine 10) comprising: an input reception portion (via receive section 20 with antenna 18) for detecting an input electromagnetic wave (signals) transmitted from a transmission terminal (pocket machine 12) at a predetermined timing and receiving the input electromagnetic wave; a lock control portion (via door-lock motor 28) for unlocking or locking a lock mechanism according to the input electromagnetic wave received by the input reception portion; and a timing change portion (via CPU 16 compares the current time and location information with the information stored on memory storage 32, if the information don't match, the intermittent mode of the receive section 20 is set to a shorter period of time by CPU 16 for receiving signals) for changing a timing at which the input reception portion detects the input electromagnetic wave. (See Paragraphs 14-18, and 30-31; and Figures 1 and 3)

Regarding claim 2, Hattori discloses the timing change portion changes the timing according to a time zone (via CPU 16 compares the current time and location

information with the information stored on memory storage 32, if the information don't match, the intermittent mode of the receive section 20 is set to a shorter period of time by CPU 16 for receiving signals, See Paragraph 31).

Regarding claim 3, Hattori discloses a position detection portion (via self-vehicle location detection equipment 28) for detecting a position of the electromagnetic wave reception device; wherein the timing change portion changes the timing according to the position detected by the position detection portion. (See paragraphs 16 and 31)

Regarding claim 7, Hattori discloses the input reception portion is powered by a battery (via receive section 20 is connected to the dc-battery 24, See Paragraph 15 and Figure 1).

Regarding claim 8, Hattori discloses a vehicle comprising the electromagnetic wave reception device of claim 1. (See Paragraph 13)

Regarding claim 9, Hattori discloses a vehicle of claim 8, wherein the input reception portion is powered by a battery (via dc-battery 24, See paragraph 15 and Figure 1).

Regarding claim 11, Hattori discloses a keyless entry system (via mounted machine 10 and pocket machine 12) comprising: an electromagnetic wave reception device (via mounted machine 10) installed in a vehicle comprising: an input reception portion (via receive section 20 with antenna 18) for detecting an input electromagnetic wave (signal) transmitted from a transmission terminal (pocket machine 12) at a predetermined timing and receiving the input electromagnetic wave; a lock control portion (via door-lock motor 28) for unlocking or locking a lock mechanism according to

the input electromagnetic wave received by the input reception portion; and a timing change portion (via CPU 16) for changing a timing at which the input reception portion detects the input electromagnetic wave; and an electromagnetic wave transmission device (via pocket machine 12) for transmitting a signal to the electromagnetic wave reception device. (See Paragraphs 14-18, and 30-31; and Figures 1 and 3)

Regarding claims 13 and 14, Hattori discloses the input reception portion is powered by a battery (via receive section 20 is connected to the dc-battery 24, See Paragraph 15 and Figure 1).

Regarding claims 18 and 19, Hattori discloses a vehicle comprising the electromagnetic wave reception device of claims 2 or 3 (See Paragraph 13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4-6, 15-17, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori as applied to claim 1 above, and further in view of Pombo et al. (US 5,799,256).

Regarding claim 4, Hattori discloses the structural elements of the claimed invention but failed to disclose a history information generation portion for generating history information, which is information on a history of reception of the input electromagnetic wave by the input reception portion; wherein the timing change portion changes the timing according to the history information.

Pombo et al. teach a method and apparatus for reducing power consumption in a portable communication device (104) by predicting a user's location, movement and actions. The portable communication device (104) is powered by a battery (120) and includes a battery control (122) for decoupling portions of the communication device (104) from the battery. Historical records of control channel and call activity are maintained in memory (117) at the communication device (104). This data is used to predict calls. This permits the communication device (104) to conserve power in the battery (120) when no call activity is likely. (See the Abstract)

From the teachings of Pombo et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Hattori to include a history information generation portion for generating history information, which is information on a history of reception of the input electromagnetic wave by the

input reception portion; wherein the timing change portion changes the timing according to the history information in order to conserver power when reception of the input electromagnetic wave is unlikely.

Regarding claim 5, the combination of Hattori and Pombo et al. disclose the claimed invention wherein Pombo et al. disclose the history information generation portion generates history information of time when the input electromagnetic wave is received (via historical records of activity are maintained in memory at the device to predict future activity, See the Abstract).

Regarding claim 6, the combination of Hattori and Pombo et al. disclose the structural elements of the claimed invention wherein Hattori discloses a position detection portion (via self-vehicle location detection equipment 28) for detecting a position of the electromagnetic wave reception device (See paragraphs 16 and 31), but Hattori failed to disclose the history information generation portion generates history information of a position where the input electromagnetic wave is received, according to the position detected by the position detection portion.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hattori and Pombo et al. to include the history information generation portion generating history information of a position where the input electromagnetic wave is received, according to the position detected by the position detection portion in order to change the timing portion to conserve power when reception of the input electromagnetic wave is unlikely in some areas.

Regarding claims 15-17, Hattori discloses the input reception portion is powered by a battery (via receive section 20 is connected to the dc-battery 24, See Paragraph 15 and Figure 1).

Regarding claims 20-22, Hattori discloses a vehicle comprising the electromagnetic wave reception device of claims 4, 5, or 6. (See Paragraph 13).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori (JP 2003102068 A), and further in view of Robinson (US 6,700,493).

Regarding claim 10, Hattori discloses an electromagnetic wave transmission device (via pocket machine 12) comprising: a switch (via actuation switch 44); a transmission portion (via antenna 46) for transmitting an electromagnetic wave for a predetermined period of time when the switch is turned on. (See Paragraph 21 and Figure 1)

But Hattori failed to disclose a transmission control portion for controlling so as to transmit a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time.

Robinson teaches a method and system to prolong the life of a battery in a radio transmitter. The circuitry of Robinson allows the radio transmitter to be in a power-standby mode except when triggered to transmit. A power-on mode for the radio transmitter is generated by an internal timer when the trigger is actuated to transmit signals. (See Col. 3, lines 33-43)

From the teachings of Robinson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Hattori to include a transmission control portion for controlling so as to transmit a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time in order to prolong the battery life on the device by transmitting the first electromagnetic wave for a shorter period of time compared to the second electromagnetic wave.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori as applied to claim 11 above, and further in view of Robinson (US 6,700,493).

Regarding claim 12, Hattori discloses an electromagnetic wave transmission device (via pocket machine 12) comprising: a switch (via actuation switch 44); a transmission portion (via antenna 46) for transmitting an electromagnetic wave for a predetermined period of time when the switch is turned on. (See Paragraph 21 and Figure 1)

But Hattori failed to disclose a transmission control portion for controlling so as to transmit a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time.

Robinson teaches a method and system to prolong the life of a battery in a radio transmitter. The circuitry of Robinson allows the radio transmitter to be in a power-standby mode except when triggered to transmit. A power-on mode for the radio

transmitter is generated by an internal timer when the trigger is actuated to transmit signals. (See Col. 3, lines 33-43)

From the teachings of Robinson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Hattori to include a transmission control portion for controlling so as to transmit a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time in order to prolong the battery life on the device by transmitting the first electromagnetic wave for a shorter period of time compared to the second electromagnetic wave.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Hang Jiang whose telephone number is 571-270-3024. The examiner can normally be reached on M-F 7:30 am to 5:30 pm alternate fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YHJ

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